DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INTRADEPARTMENTAL CORRESPONDENCE

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MEMORANDUM

TO: Charles W. Bolinger, FHWA Division Administrator
Vince Russo, Project Development Engineer
Buddy Porta, Road Design Engineer
Janice Williams, Systems Engineer
Hossein Ghara, Bridge Design Engineer
Brian Buckel, Construction Engineer
Peter Allain, Traffic Engineer
Gordon Nelson, Operations Assistant Secretary
Eric Kalivoda, Planning and Program Assistant Secretary
Each District Administrator

FROM: Mr. William Temple, P.E. WHT
Chief Engineer

DATE: December 10, 2008

SUBJECT: Interim Policy for Micro-Simulation

This will serve as an interim policy for the Department's use and acceptance of micro-simulation modeling for all applications including but not limited to planning, design, environmental, operational, traffic engineering studies, permit applications and public meetings.

At this time, the only two micro-simulation modeling software approved by the Department are Corsim and Vissim. Vissim is the only software that may be used to model alternatives that include roundabouts.

All micro-simulation modeling applications must be approved by the Traffic Modeling Engineer in Section 27. If the Traffic Modeling Engineer approves the use of modeling then a schedule of deliverables and timelines shall be established.

12/10/08
RECOMMENDED FOR APPROVAL DATE

RECOMMENDED FOR APPROVAL DATE

RECOMMENDED FOR APPROVAL DATE

W. Temple 12-15-08
APPROVED DATE

AN EQUAL OPPORTUNITY EMPLOYER
A DRUG-FREE WORKPLACE

For approved applications, the following are phases and deliverables that are required for each study. The deliverables for each phase shall be approved before the next set of deliverables may be submitted. These deliverables are defined in the FHWA publication "Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software".

Phase 1.

1) Study Scope and Schedule (study objectives, geographic and temporal scope, alternatives)
2) Data Collection plan
3) Calibration plan (calibration plan and targets)
4) Coding quality assurance plan (coding error checking procedures, calibration plan and targets)

Phase 2.

5) Data collection results report (data collection procedures, quality assurance and summary of results)
6) 50% coded model to check model development (software input files)

Phase 3.

7) 100% coded model for error checking (software input files)
8) Calibration test results report (calibration procedures, adjusted parameters and rationale, achievement of calibration targets)

Phase 4.

9) Alternatives analysis report (description of alternatives, analytical procedures, results)
10) Final report (Summary tables and graphics highlighting key results)
11) Technical documentation (Compilation of prior reports documenting model development and calibration, software input files)

At the discretion of the Traffic Modeling Engineer, a review committee can be established to facilitate the timely and accurate completion of modeling studies.

The Department shall work on finalizing this policy into an EDSM. Micro-simulation modeling studies performed under this interim policy will be used to better define the steps, deliverables, approvals, and project types of the final policy. The target date for the final policy in EDSM format is December 1, 2009.